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[Continued on next page]

(54) Title: ISOLATED HUMAN ION CHANNEL PROTEINS, NUCLEIC ACID MOLECULES ENCODING HUMAN ION CHANNEL PROTEINS, AND USES THEREOF

HOMOLOGOUS PROTEINS:

Top 10 BLAST hits:

Accession	Score	E
CAA19800094360178 /altid=q112804493 /def=gbiAAH0165r:11AAH016...	529	e-149
CAA11000479457833 /altid=q116941066 /def=gbiAAAF28888:11AF12330...	325	9e-88
CAA1335001092641184 /altid=q111360341 /def=pic11730666 peroxis...	315	1e-84
CAA198000043621819 /altid=q112853689 /def=dbj1BAB29816.11 (AKO...	300	4e-80
CAA18000005183605 /altid=q117504235 /def=pic11722688 hypothetic...	241	2e-62
CAA11006682325160 /altid=q117495323 /def=pic11721074 hypothetic...	210	4e-53
CAA115003007553401 /altid=q119758252 /def=dbj1BAB0871: 11 IAB0...	191	2e-44
CAA1335001098657884 /altid=q111358611 /def=pic11749871 peroxis...	175	1e-42
CAA1163000046661776 /altid=q110176874 /def=dbj1BAB10091.11 (AB...	169	8e-41
CAA189000000196990 /altid=q117294582 /def=gbiAAAF49922 11 (AE003...	141	4e-32

BLAST dbEST hits:

Accession	Score	E
q112323398 /dataset=dbest /taxon=96...	997	0.0
q111448551 /dataset=dbest /taxon=96...	952	0.0
q111326910 /dataset=dbest /taxon=96...	850	0.0
q115425445 /dataset=dbest /taxon=9606...	825	0.0
q113400522 /dataset=dbest /taxon=9606...	747	0.0
q112324195 /dataset=dbest /taxon=96...	678	0.0
q118278789 /dataset=dbest /taxon=960...	674	0.0
q113797306 /dataset=dbest /taxon=9606...	672	0.0
q111446993 /dataset=dbest /taxon=96...	670	0.0
q115676270 /dataset=dbest /taxon=9606...	615	e-173

EXPRESSION INFORMATION FOR MODULATORY USE:

Library source:

From BLAST dbEST hits:

q112323398 /nervous tumor
q111448551 /ovary-fibrotheoma
q111326910 /nervous_normal
q115425445 /lung
q118278789 /cervix
q115676270 /brain

From tissue screening panels:

hippocampus

FEATURES:

5'UTR: 1-100
Start Codon: 101
Stop Codon: 1277
3'UTR: 1280

(57) Abstract: The present invention provides amino acid sequences of peptides that are encoded by genes within the human genome, the transporter peptides of the present invention. The present invention specifically provides isolated peptide and nucleic acid molecules, methods of identifying orthologs and paralogs of the transporter peptides, and methods of identifying modulators of the transporter peptides.

WO 02/02635 A2